

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-2. (Cancelled)

3. (Currently amended) A TTGE DNA migration marker, comprising: a substantially pure DNA molecule comprising a TCR gene sequence, wherein said DNA molecule has a predetermined melting profile; and a buffer suitable for loading on a TTGE gel.

4. (New) A TTGE DNA migration marker according to claim 3, wherein said DNA molecule comprises a GC-clamp.

5. (New) A TTGE DNA migration marker according to claim 3, wherein said TCR gene sequence is derived from a rearranged TCR γ gene.

6. (New) A TTGE DNA migration marker according to claim 5, wherein said TCR gene sequence is amplified using a primer complementary to the V region of the TCR gene and a primer complementary to the J region of the TCR gene.

7. (New) A TTGE DNA migration marker according to claim 6, wherein said DNA molecule comprises a TCR gene sequence amplified by oligonucleotide primers set forth in SEQ ID NO:3 and SEQ ID NO:4.

8. (New) A method for determining the clonality of a T-cell receptor (TCR) rearrangement in a sample, comprising:

amplifying TCR DNA fragments from the sample, and

analyzing said TCR DNA fragments and one or more migration markers according to claim 3 by temporal temperature gradient gel electrophoresis (TTGE).